#### Comparison of 1971-2000 to 1981-2010 Seasonal Normals

The 1981-2010 normals were calculated using different methods than the 1971-2000 normals. As such, the two databases should not be directly compared. However, the National Climatic Data Center, which is responsible for formulating U.S. normals, re-calculated the 1981-2010 normals in a separate database using the 1971-2000 methods so that the two normals packages could be compared "apples to apples."

In the tables below, the differences between the old and new normals are shown. The values show the increase or decrease from the old normals to the new normals. So, for example, the average winter temperature at Bowling Green increased (got warmer) by 0.9° from the old normals to the new normals. For another example, average summer precipitation at Louisville decreased (got drier) from the old normals to the new normals.

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## Seasonal Average Temperature:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | 0.9°          | 0.4°      | 0.5°       |
| MAM   | 0.6°          | 0.4°      | 0.5°       |
| JJA   | 0.4°          | 0.4°      | 0.5°       |
| SON   | 0.6°          | 0.4°      | 0.5°       |

### Seasonal Average Maximum Temperature:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | 0.8°          | 0.2°      | 0.3°       |
| MAM   | 0.6°          | 0.3°      | 0.4°       |
| JJA   | 0.3°          | 0.5°      | 0.4°       |
| SON   | 0.7°          | 0.5°      | 0.5°       |

### Seasonal Average Minimum Temperature:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | 1°            | 0.6°      | 0.7°       |
| MAM   | 0.7°          | 0.6°      | 0.8°       |
| JJA   | 0.6°          | 0.4°      | 0.6°       |
| SON   | 0.4°          | 0.3°      | 0.4°       |

## Seasonal Number of Days with Temperatures at or Above 90°:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | 0             | 0         | 0          |
| MAM   | -0.3          | -0.1      | 0.2        |
| JJA   | 0.7           | 1.8       | 1.8        |
| SON   | 0.1           | 0.6       | 0.4        |

## Seasonal Number of Days with High Temperatures at or below 32°:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | -2            | -1.2      | -1.7       |
| MAM   | -0.1          | -0.2      | -0.1       |
| JJA   | 0             | 0         | 0          |
| SON   | -0.1          | 0         | 0          |

### Seasonal Number of Days with Low Temperatures at or below 32°:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | -2.2          | -0.1      | -1.2       |
| MAM   | -0.9          | -0.2      | -0.5       |
| JJA   | 0             | 0         | 0          |
| SON   | -0.9          | -1.1      | -0.6       |

## Seasonal Number of Days with Low Temperatures at or below 0°:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | -0.4          | -0.6      | -0.3       |
| MAM   | 0             | -0.1      | 0          |
| JJA   | 0             | 0         | 0          |
| SON   | 0             | 0         | 0          |

### Average Seasonal Precipitation:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | -1.09         | -0.33     | 0.03       |
| MAM   | -0.29         | 0.07      | 0.24       |
| JJA   | -0.59         | -0.82     | -0.24      |
| SON   | -0.06         | 0.31      | 0.21       |

### Average Seasonal Number of Days with Measurable Precipitation:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | -1.6          | -0.1      | -0.8       |
| MAM   | -0.9          | -0.1      | -0.6       |
| JJA   | 0.3           | 0         | -0.3       |
| SON   | -0.6          | -0.8      | -1.1       |

## Average Seasonal Number of Days with at Least 0.10" of Precipitation:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | -0.7          | 0.1       | 0.2        |
| MAM   | -1.2          | -0.8      | -0.9       |
| JJA   | 0.2           | -0.5      | 0.1        |
| SON   | -0.8          | -0.1      | -1.1       |

### Average Seasonal Number of Days with at Least 0.50" of Precipitation:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | -0.1          | 0.1       | 0.2        |
| MAM   | -0.1          | -0.5      | 0          |
| JJA   | -0.1          | -0.4      | -0.2       |
| SON   | -0.1          | 0.2       | 0          |

## Average Seasonal Number of Days with at Least 1" of Precipitation:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | -0.3          | -0.2      | -0.1       |
| MAM   | 0.3           | 0.3       | 0.2        |
| JJA   | -0.1          | -0.3      | 0.2        |
| SON   | -0.1          | 0.1       | 0.2        |

#### Average Seasonal Snowfall:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | -1.3          | -1        | 0          |
| MAM   | 0             | -0.7      | -0.8       |
| JJA   | 0             | 0         | 0          |
| SON   | -0.1          | -0.2      | -0.5       |

### Average Seasonal Number of Days with Measurable Snow:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | 0             | -0.5      | -0.6       |
| MAM   | 0.1           | -0.8      | -0.8       |
| JJA   | 0             | 0         | 0          |
| SON   | 0             | -0.4      | -0.2       |

## Average Seasonal Number of Days with at Least 1" of Snow:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | -0.9          | -0.2      | 0          |
| MAM   | 0.1           | -0.3      | -0.3       |
| JJA   | 0             | 0         | 0          |
| SON   | -0.1          | -0.1      | -0.2       |

# Average Seasonal Heating Degree Days:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | -77           | -35       | -39        |
| MAM   | -37           | -25       | -29        |
| JJA   | -2            | -5        | -2         |
| SON   | -48           | -32       | -33        |

# Average Seasonal Cooling Degree Days:

| Month | Bowling Green | Lexington | Louisville |
|-------|---------------|-----------|------------|
| DJF   | 0             | 0         | 0          |
| MAM   | 22            | 14        | 21         |
| JJA   | 37            | 36        | 44         |
| SON   | 8             | 4         | 13         |